

in either of these two racial categories, transitional intermediates do occur.

KEY TO THE OREGON SPECIES OF HELIANTHELLA

- Cauline leaves alternate, except the lowermost pair. Leaves chiefly basal, at the summit of a slender caudex..... *H. californica*  
var. *nevadensis*
- Cauline leaves opposite. Leaves chiefly cauline. Caudex stout.
- Cauline leaves attenuate at both ends, long petiolate. Phyllaries ovate, conspicuously ciliate, blackish on drying ..... *H. quinquenervis*
- Cauline leaves merely acute, short-petiolate or sessile. Phyllaries lanceolate, variously pubescent, drying green.
- Heads large, 2.0-2.5 cm. broad excluding the rays. Phyllaries ciliate..... *H. uniflora*  
var. *Douglasii*
- Heads small, 1.5-2.0 cm. broad excluding the rays. Phyllaries uniformly cinereous-pubescent..... *H. uniflora*

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A NEW POLEMONIUM FROM MEXICO

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***Polemonium glabrum*** sp. nov. Erecta, humilis, 2-3 dm. alta; rachis foliis angustate-alatis; foliolis 6-8-junctis, glabris vel ciliatis; calycis glabris, angustate-campanulatis, 10 mm. longis, segmentis angustatis acutis, tubis æqualibus; corollis cæruliis, infundibuliformibus, 25-30 mm. longis, 15-20 mm. latis, lobis tubarum brevioribus, spathulatis, apiculatis.

A slender erect perennial 2-3 dm. tall from a rootstock or horizontal rhizome; leaves 4-8 cm. long with 13-17 leaflets 3-11 mm. long, 2-4 mm. wide, elliptical, acute, glabrous or ciliate on a slightly winged rachis, the bases of the distal five leaflets commonly confluent; calyx glabrous, narrowly campanulate, 10 mm. long, 4 mm. broad, the segments narrow, acute, equalling the tube; corolla blue, truly funnellform in limb as well as in tube, 25-30 mm. long, 15-20 mm. broad, the lobes two-thirds as long as the tube, spatulate and apiculate; stamens inserted 3 mm. from the base of the corolla-tube, pubescent at, and slightly above, the point of insertion, 20 mm. long; style slightly exceeding the stamens, shorter than the corolla; capsule ovoid, many seeded; seeds not becoming mucilaginous when wet.

Type. Mt. Mohinora (10 miles west of Guadalupe y Calvo), southwest Chihuahua, Mexico, September 1, 1898, *E. W. Nelson 4865* (United States National Herbarium).



PLATE 23. *POLEMONIUM GLABRUM*. Fig. 1, habit,  $\times \frac{1}{2}$ . Fig. 2, calyx,  $\times 1\frac{1}{2}$ . Fig. 3, floral dissection, natural size. Fig. 4, capsule dissection,  $\times 1\frac{1}{2}$ . Fig. 5, leaf apex,  $\times 1\frac{1}{2}$ .

*Polemonium glabrum* may be distinguished readily from any other naturally occurring *Polemonium* by the shape and size of the corolla, and by its glabrous calyx. The only other record of a similar corolla is found in the report by Ostenfeld (Genetic studies in *Polemonium*, *Hereditas* 12: 31-39. 1929.) of crosses between *P. mexicanum* Cerv. ex Lag. and *P. pauciflorum* S. Wats. The affinities of the present species may well be with the above, but neither *P. mexicanum* nor *P. pauciflorum* have been reported from the vicinity of *P. glabrum*. The probability of *P. glabrum* being merely a hybrid (*P. mexicanum* × *pauciflorum*) was considered and discounted because of the absence of the putative parents and because of its constant pollen size. The pollen of known hybrids has been found by the author to show irregularities in size, whereas the pollen of *P. glabrum* is perfectly normal. Also there is apparently no reduction in the number of seeds set, as might be expected in the case of a hybrid plant.

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#### NOTES ON THE TAXONOMY OF SOME EASTERN ASIATIC FERNS OF THE GENERA PROTO- WOODSIA AND PTERETIS

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While glancing over a recent paper of Dr. R. C. Ching (1945, p. 36) and a review of the same paper in *Biological Abstracts* (1946), the author noticed the generic name *Proto-woodsia* being used for a new genus of ferns. Since he was familiar with this name as early as 1941, verifying the validity of the name seemed necessary. In checking over his notes, the author found the following sequence of circumstances.

In 1940 Dr. Ching (p. 245) used the generic name *Proto-woodsia*, listing under it "*P. manchuriensis* (Hook.) Ching. A monotypic genus confined to N. E. Asia." The only description of the genus is to be found in his description of the new family Woodsiaceae, as "spores bilateral, dark-colored, with perispores, or tetraedral, smooth and translucent (*Protowoodsia*)." Concluding his description of the Woodsiaceae, Ching remarks that this is "a very small family of two genera and about forty species; its affinities with *Cyathea* and the next two families has generally been recognized."

The manner in which the name *Protowoodsia* appeared in Ching's paper led the author to believe that the generic name had been validly published elsewhere. Therefore, in his doctorate thesis in 1942 (p. 73), the author used the generic name as follows: "*Protowoodsia* Ching has translucent, smooth, subglobose to bilateral spores lacking an exospore (*P. manchurien-*